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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	09/901,279	FUJITA, KIMIKAZU	
Office Action Summary	Examiner	Art Unit	
	Justin E. Shepard	2623	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	e correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MAILING THE MAIL	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).	
Status			
3) Since this application is in condition for allowar	action is non-final.		
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11,	453 O.G. 213.	
Disposition of Claims			
4) ⊠ Claim(s) 1,2,4,9,11,12 and 14-23 is/are pendin 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,2,4,9,11,12 and 14-23 is/are rejecte 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplished any accomplished any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the drawing(s) be held in abeyance. So ion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).	
· —			
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicative documents have been rece u (PCT Rule 17.2(a)).	ation No ived in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summa Paper No(s)/Mail 5)  Notice of Informa 6)  Other:		

# **DETAILED ACTION**

# Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/15/06 has been entered.

# Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 9, 11, 12, and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elderling, U.S. Patent Number 6,615,039 in view of Suzuki.

Referring to claim 1, Eldering discloses a broadcasting apparatus (column 2, lines 35-38; figure 2, parts 211 and 209) that broadcasts a specific program to which a

reproduction time period between a starting time and a finishing time is specified (figure 7, box labeled "PROGRAMMING"; figure 9; Note: the time for inserting the advertisement listed in the "Insert Time" column indicates that the program from figure 7 must have a planned start and stop time), the reproduction being performed by a receiving apparatus (figure 2, part 209), the broadcasting apparatus comprising: allotment means for allotting a broadcasting bandwidth for the reproduction time period to the specific program (column 9, line 67, column 10, lines 1-3) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to another program (column 10, lines 2-3, 8-10; figure 7, part AD1 and signals running from part 802 to 806);

script generation means for generating, (a) when receiving a storage instruction, a script instructing the receiving apparatus to store program data of the specific program in a storage unit of the receiving apparatus (column 7, lines 28-30; column 10, lines 8-10; Note: a device that stores advertisements would inherently have an instruction that caused the device to store the advertisement),

message generation means for generating a plurality of storage instructions and a reproduction instruction (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

transmission means for, (a) in accordance with the result of allotment by the allotment means, repeatedly transmitting program data of the other program while transmitting the program data of the specific program in the preceding time period

(column 10, lines 37-41; Note: sending the data whenever there is spare bandwidth is being interpreted as being equivalent to repeatedly sending data), and repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-41),

and (b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted (column 8, lines 34-36, column 10, lines 37-45; Note: sending data whenever the channel is idle is interpreted as repeatedly sending the data); and control means for controlling the transmission means to transmit the storage instructions in the preceding time period and to transmit the reproduction instruction at the starting time (figure 3, part 301; column 5, lines 28-43 column 6, lines 40-44)),

wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44), and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46; Note: Eldering shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes than the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps and is interpreted as the commercial and the program being broadcast during the same time period).

Eldering does not disclose a system with script generating means for generating,

(b) when receiving a reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program in a case where the program data of the specific program has been stored in the storage unit.

Suzuki discloses a system with script generating means for generating, (b) when receiving a reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program in a case where the program data of the specific program has been stored in the storage unit (column 23, lines 22-25; Note: a script is interpreted as being a set of instructions for an application (Microsoft Computer Dictionary) and the instructions taught by Suzuki are interpreted as being equivalent to a script).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 2, Eldering discloses an apparatus of Claim 1, wherein the allotment means allots the broadcasting bandwidth for the preceding time period so that the part of the broadcasting bandwidth becomes narrower than the other part of the broadcasting bandwidth (column 7, lines 29-37; Note: as the advertisement gets downloaded the bandwidth for the program is going to decrease), and the preceding

time period is longer than a time period that is necessary for transmitting the program data of the specific program at least once using the part of the bandwidth (column 7, lines 31-32; Note: advertisements being downloaded shortly in advance is being interpreted as equivalent to downloading them in a shorter amount of time than it takes to reproduce them).

Referring to claim 4, Eldering discloses an apparatus of Claim 1, further comprising: storage means for storing as the program data of the specific program (a) first contents data that makes up the specific program (figure 5, "AD1") and (b) second contents data that is different from the first contents data in part (figure 5, "AD2"), wherein the transmission means transmits the first contents data in the preceding time period and transmits the second contents data in the reproduction time period of the specific program (column 7, lines 29-34).

Referring to claim 9, Eldering discloses a broadcasting apparatus that transmits a data broadcasting program and a first and a second specific programs which are inserted in the data broadcasting program (figure 7), the broadcasting apparatus comprising: allotment means for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are a starting time and broadcasting program (figure 5, bottom right hand corner), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part

of the broadcasting bandwidth to the data broadcasting program for included in a total time period other than the first and the second time periods in the total time period (column 7, lines 29-37);

script instruction generation means for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and, (b) when receiving a second storage instruction, a script instructing the receiving apparatus to store program data of the second specific program in the storage unit (column 7, lines 28-30; column 10, lines 8-10; figure 7);

message generation means for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and transmission means for transmitting the scripts during the total time period, and repeatedly transmitting the program data of each of the data broadcasting program, the fist specific program, and the second specific program in accordance with the result of allotment by the allotment means (column 10, lines 37-45; Note: sending data whenever the channel is idle is interpreted as repeatedly sending the data); and control means for controlling the transmission means so as to transmit (a) a plurality of the first storage instructions before the first time period; (c) a plurality of the second storage instructions before the second time period (column 7, lines 29-37), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data

that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

and the first time period and the second time period respectively are the same as broadcast time periods of the first commercial program and the second commercial program (column 7, lines 41-46).

Eldering does not disclose a broadcasting apparatus with a script instruction generating means for generating (a) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program in a case that the program data of the second specific program in a case that the program data of the second specific program in a case that the program data of the

Suzuki discloses a broadcasting apparatus with a script instruction generating means for generating (a) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program in a case that the program data of the second specific program in a case that the program data of the second specific program has been stored in the storage unit (column 23, lines 22-25; Note: if you are caching multiple programs as disclosed in Eldering, it would be obvious

that you would need multiple copies of the signals disclosed in Suzuki), and a message generation means for generating a first reproduction instruction and a second reproduction instruction (figure 4; column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 11, Eldering discloses an apparatus of Claim 9, further comprising: storage means for storing as the program data of the first specific program (a) first contents data that makes up the first specific program (figure 5, "AD1") and (b) second contents data that is different from the first contents data in part (figure 5, "AD2"), wherein the transmission means transmits the first contents data in a time period other than the first time period in the total time period, and transmits the second contents data in the first time period (column 7, lines 29-34).

Referring to claim 12, Eldering discloses a broadcasting apparatus that transmits a data broadcasting program and a first and a second specific programs which are inserted in the data broadcasting program (figure 7), the broadcasting apparatus comprising: allotment means for (a) allotting a broadcasting bandwidth period and a second time period to the first specific program and the second specific program (figure

7), the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program, and for a first time (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period (column 7, lines 29-37), (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period (column 7, lines 29-37), and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37);

script instruction generation means for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and, (b) when receiving a second storage instruction, a script instructing the receiving apparatus to store program data of the second specific program in the storage unit (column 7, lines 28-30; column 10, lines 8-10; figure 7);

message generation means for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

transmission means for repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-45), the first specific program, and the second specific program in accordance with the result of allotment by the allotment means;

(b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted (column 8, lines 34-36, column 10, lines 37-45)

and control means for controlling the transmission means so as to transmit (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period (Note: the storage instructions would have to be transmitted prior to the first period or it wouldn't be effective to store the program after the program was supposed to be reproduced), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

and the first time period and the second time period respectively are the same as broadcast time periods of the first commercial program and the second commercial program (column 7, lines 41-46).

Eldering does not disclose a broadcasting apparatus with a script instruction generating means for generating (a) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program in a case that the program data of the second specific program in a case that the program data of the

Suzuki discloses a broadcasting apparatus with a script instruction generating means for generating (a) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program in a case that the program data of the second specific program has been stored in the storage unit (column 23, lines 22-25; Note: if you are caching multiple programs as disclosed in Eldering, it would be obvious that you would need multiple copies of the signals disclosed in Suzuki).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 14, Eldering discloses an apparatus of Claim 12, further comprising: storage means for storing as the program data of the first specific program (a) first contents data that makes up the first specific program (figure 5, "AD1") and (b) second contents data that is different from the first contents data in part (figure 5, "AD2"), wherein the transmission means transmits the first contents data in a time

period preceding to the first time period in the total time period, and transmits the second contents data the first time period (column 7, lines 29-34).

Referring to claim 15, Eldering discloses a broadcasting method for broadcasting a specific program to which a reproduction time period between a starting time and a finishing time is specified (figure 7, figure 9), the reproduction being performed by a receiving apparatus (figure 2, part 209), the broadcasting method comprising the steps of: an allotment step for allotting a broadcasting bandwidth for the reproduction time period to the specific program (figure 7) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 7, lines 29-37);

script generation means for generating, (a) when receiving a storage instruction, a script instructing the receiving apparatus to store program data of the specific program in a storage unit of the receiving apparatus (column 7, lines 28-30; column 10, lines 8-10; Note: a device that stores advertisements would inherently have an instruction that caused the device to store the advertisement),

message generation means for generating a plurality of storage instructions and a reproduction instruction (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step, in accordance with the result of allotment in the allotment step, for (a) repeatedly transmitting program data of the other program while

transmitting program data of the specific program in the preceding time period (column 10, lines 37-45), and (b) repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-45),

and (b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted (column 8, lines 34-36, column 10, lines 37-45),

a control step for controlling the transmission means to transmit the storage instructions in the preceding time period and to transmit the reproduction instruction at the starting time (column 7, lines 29-37),

wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44), and

the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose a system with script generating means for generating,
(b) when receiving a reproduction instruction, a script instructing the receiving apparatus
to reproduce the program data of the specific program in a case where the program
data of the specific program has been stored in the storage unit.

Suzuki discloses a system with script generating means for generating, (b) when receiving a reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program in a case where the program data

of the specific program has been stored in the storage unit (column 23, lines 22-25; Note: a script is interpreted as being a set of instructions for an application (Microsoft Computer Dictionary) and the instructions taught by Suzuki are interpreted as being equivalent to a script).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 16, Eldering discloses a broadcasting method for transmitting a data broadcasting program and a first specific program and a second specific program which are interposed in the data broadcasting program (figure 7), the broadcasting method comprising the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37);

a script instruction generating step for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and (b) when receiving a second storage instruction, a script instructing receiving apparatus to store program data of the second specific program in the storage unit (column 6, liens 40-44),

a message generation step for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step for, with transmitting the scripts during total time period, transmitting (a) the first storage instructions before the first time period, (c)a plurality of the second storage instructions before the second time period, and while repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-41), the fist specific program and the second specific program in accordance with the result of allotment in the allotment step, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the

specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit.

Suzuki discloses an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 17, Eldering discloses a broadcasting method for transmitting a data broadcasting program and a first specific program and a second specific program which are inserted in the data broadcasting program (figure 7), the broadcasting method comprising the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second

specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period, (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period, and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period (column 7, lines 29-37);

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a script instruction generating step for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and (b) when receiving a second storage instruction, a script instructing receiving apparatus to store program data of the second specific program in the storage unit (column 6, liens 40-44),

a message generation step for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period, while repeatedly transmitting the program data of each of the data broadcasting program, the specific program, and the second specific program (column 10, lines 37-45; Note: the storage instructions would have to be sent

before the device would be able to store the programs) in accordance with the result of allotment in the allotment step,

and (b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted (column 8, lines 34-46; column 10, lines 37-45),

wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44);

the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit.

Suzuki discloses an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second

reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 18, Eldering discloses a program recording medium which is readable for a computer in a broadcasting apparatus (column 4, lines 30-33; Note: use on the internet is being interpreted as being used on a computer, which would run a program), the broadcasting apparatus broadcasts a specific program to which a reproduction time period between a starting time and finishing time is specified (figure 7, figure 9), the reproduction being performed by a receiving apparatus the computer program embodied on the program recording medium has the computer conduct the steps of: an allotment step for allotting a broadcasting bandwidth for the reproduction time period to the specific program (figure 7, figure 9) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 7, lines 29-37);

a script generation means for generating, (a) when receiving a storage instruction, a script instructing the receiving apparatus to store program data of the specific program in a storage unit of the receiving apparatus (column 7, lines 28-30; column 10, lines 8-10; Note: a device that stores advertisements would inherently have an instruction that caused the device to store the advertisement),

message generation means for generating a plurality of storage instructions and a reproduction instruction (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

transmission means for, (a) in accordance with the result of allotment by the allotment means, repeatedly transmitting program data of the other program while transmitting program data of the specific program in the preceding time period (column 10, lines 37-41; Note: sending the data whenever there is spare bandwidth is being interpreted as being equivalent to repeatedly sending data), repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-41),

and (b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted (column 8, lines 34-36, column 10, lines 37-45; Note: sending data whenever the channel is idle is interpreted as repeatedly sending the data); and control means for controlling the transmission means to transmit the storage instructions in the preceding time period and to transmit the reproduction instruction at the starting time (figure 3, part 301; column 5, lines 28-43 column 6, lines 40-44)),

wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44), and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose a system with script generating means for generating, (a) when receiving a storage instruction, a script instructing the receiving apparatus to store program data of the specific program in a storage unit of the receiving apparatus, and (b) when receiving a reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program in a case where the program data of the specific program has been stored in the storage unit.

Suzuki discloses a system with script generating means for generating, (b) when receiving a reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program in a case where the program data of the specific program has been stored in the storage unit (column 23, lines 22-25; Note: a script is interpreted as being a set of instructions for an application (Microsoft Computer Dictionary) and the instructions taught by Suzuki are interpreted as being equivalent to a script).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to

enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 19, Eldering discloses a program recording medium which is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the computer program embodied on the program recording medium has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37);

a script instruction generating step for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and (b) when receiving a second storage instruction, a script instructing receiving apparatus to store program data of the second specific program in the storage unit (column 6, liens 40-44),

a message generation step for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step for, with transmitting the scripts during the total time period, transmitting (a) a plurality of the first storage instructions before the first time period, and (c) a plurality of the second storage instructions before the second time period, while repeatedly transmitting the program data of each (column 10, lines 37-45), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit.

Suzuki discloses an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the

program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 20, Eldering discloses a program recording medium which is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the computer program embodied on the program recording medium has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program the first time period and the and the second specific program, second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period

and the second time period (column 7, lines 29-37), (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period (column 7, lines 29-37), and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37);

a script instruction generating step for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and (b) when receiving a second storage instruction, a script instructing receiving apparatus to store program data of the second specific program in the storage unit (column 6, liens 40-44),

a message generation step for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period, while repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-45), the first specific program, and the second specific program in accordance with the result of allotment in the allotment step, and (b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream

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(column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit.

Suzuki discloses an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to

enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 21, Eldering discloses a program that is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus broadcasts a specific program to which a reproduction time period between a starting time and finishing time is specified (figure7), the reproduction being performed by a receiving apparatus (figure 2, part 201), the program has the computer conduct the steps of: an allotment step for allotting a broadcasting bandwidth for the reproduction time period to the specific program (figure 7) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 7, lines 29-37);

script generation means for generating, (a) when receiving a storage instruction, a script instructing the receiving apparatus to store program data of the specific program in a storage unit of the receiving apparatus (column 7, lines 28-30; column 10, lines 8-10; Note: a device that stores advertisements would inherently have an instruction that caused the device to store the advertisement),

message generation means for generating a plurality of storage instructions and a reproduction instruction (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step, in accordance with the result of allotment in the allotment step, for (a) repeatedly transmitting program data of the other program while transmitting program data of the specific program in the preceding time period, and (b) repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-45),

and (b) repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted (column 8, lines 34-36, column 10, lines 37-45; Note: sending data whenever the channel is idle is interpreted as repeatedly sending the data); and control means for controlling the transmission means to transmit the storage instructions in the preceding time period and to transmit the reproduction instruction at the starting time (figure 3, part 301; column 5, lines 28-43 column 6, lines 40-44)),

wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message, which is inserted in the normal program (column 6, lines 40-44).

and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose a system with script generating means for generating,
(b) when receiving a reproduction instruction, a script instructing the receiving apparatus
to reproduce the program data of the specific program in a case where the program
data of the specific program has been stored in the storage unit.

Suzuki discloses a system with script generating means for generating, (b) when receiving a reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the specific program in a case where the program data of the specific program has been stored in the storage unit (column 23, lines 22-25; Note: a script is interpreted as being a set of instructions for an application (Microsoft Computer Dictionary) and the instructions taught by Suzuki are interpreted as being equivalent to a script).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 22, Eldering discloses a program that is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the program has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting a part of the

broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37);

a script instruction generating step for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and (b) when receiving a second storage instruction, a script instructing receiving apparatus to store program data of the second specific program in the storage unit (column 6, liens 40-44),

a message generation step for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step for, with transmitting the scripts during the total time period transmitting the first storage instructions before the first time period, and (c) a plurality of the second storage instructions before the second time period while repeatedly transmitting the program data of each of the data broadcasting program (column 10, line 37-45), the first specific program, and the second specific program in accordance with the result of allotment the allotment step, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit.

Suzuki discloses an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Referring to claim 23, Eldering discloses a program that is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the program has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period, (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period, and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37);

a script instruction generating step for (i) generating (a) when receiving a first storage instruction, a script instructing the receiving apparatus to store program data of the first specific program in a storage unit of the receiving apparatus and (b) when receiving a second storage instruction, a script instructing receiving apparatus to store program data of the second specific program in the storage unit (column 6, liens 40-44),

a message generation step for generating a plurality of first storage instructions, a plurality of second storage instructions (figure 3, part 301; column 5, lines 28-43; column 6, lines 40-44);

and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period, , while repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-45), the fist specific program, and the second specific program in accordance with the result of allotment in the allotment step, and (b)repeatedly transmitting the scripts in a time period when the program data of the specific program is transmitted, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

and the reproduction time period of the specific program is the same as a broadcast time period of the commercial message (column 7, lines 41-46).

Eldering does not disclose an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit.

Suzuki discloses an apparatus where generating (ii) when receiving a first reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the first specific program in a case that the program data of the specific program has been stored in the storage unit, and (b) when receiving a second reproduction instruction, a script instructing the receiving apparatus to reproduce the program data of the second specific program of the second specific program has been stored in the storage unit (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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